

Name: _____

at1124exam: Radicals and Squares (v805)

Question 1

Simplify the radical expressions.

$$\sqrt{27}$$

$$\sqrt{98}$$

$$\sqrt{12}$$

Question 2

Find all solutions to the equation below:

$$\frac{(x + 10)^2}{8} - 7 = 1$$

Question 3

By completing the square, find both solutions to the given equation. *You must show work for full credit!*

$$x^2 - 14x = 72$$

Question 4

A quadratic polynomial function is shown below in standard form.

$$y = 3x^2 - 30x + 84$$

Express the function in **vertex form** and identify the **location** of the vertex.